



POWER EFFICIENCY

INDUCTIVE COMPONENTS FOR SMART GRID APPLICATIONS

Renewable energy and an intelligent networked energy supply are highly topical issues. After starting its journey with PV inverters years ago, STS has now also turned its attention to topics such as e-mobility, smart energy storage systems and fuel cell applications.

Our highly efficient (up to 99.8 %) inductive components will help to boost the efficiency of your converters.

With cooling methods tailored to your cooling system coupled with tried-and-tested insulation methods, we make sure that our parts will work reliably in any application for many years.

Thanks to our automated manufacturing processes (lean production), we can also produce large quantities of inductive components quickly and cost-effectively.

150

QUALIFIED
EMPLOYEES

15

% RESEARCH &
DEVELOPMENT

1973

MEDIUM FREQUENCY –
RIGHT FROM THE START

100

% MADE IN
GERMANY



MF-POWER-TRANSFORMERS

Key Data:
P = 58 kW | F = 60-80 kHz

Dimensions:
152 x 129 x 155 mm
(L x W x H)

Weight:
9.1 kg

Specials:
Using the latest core technologies, power transformers can also be optimised for power density at higher frequencies. The optimised thermal management system implemented in the transformer directs losses directly from the hot spot of the component to the heat sink via the bottom of the housing – as a result, only < 20 % of losses distributed inside the converter.

Key Data:
P = 100 kW | F = 25 kHz

Dimensions:
290 x 168 x 125 mm
(L x W x H)

Weight:
15.8 kg

Specials:
Optimised winding design and tailored core technology permit a low winding capacity in combination with a flat design.



HIGH-POWER-DENSITY-TRANSFORMERS



COMBINED-COMPONENTS

Key Data:
P = 55 kW | F = 30 kHz

Dimensions:
305 x 115 x 65 mm
(L x W x H)

Weight:
7.6 kg

Specials:
Combining several individual inductors in component housing creates production advantages in the end device.

Key Data:
L = 100 μ H | I = 440 A
F = 1,8 kHz | J = 25 App
@ 25 kHz

Dimensions:
550 x 240 x 150 mm
(L x B x H)

Weight:
55 kg

Specials:
Mounted on an integrated water cooled cold plate ; Distributed air gap to minimize additional copper losses;
P.D. stable insulation system up to 1.3 kV (<10 pC).



AC-FILTER-INDUCTORS



MF-POWER-TRANSFORMER

Key Data:
P = 40 kW
F = 40 kHz

Dimensions:
95 x 70 x 80 mm
(L x W x H)

Weight:
2.9 kg

Specials:
High power density thanks to optimized cooling structure and optimized electromagnetic design.

